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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,039	09/07/2006	Matthijis Carolus Piek	NL 030955	2371

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EXAMINER	
COUSO, YON JUNG	
ART UNIT	PAPER NUMBER
2624	
MAIL DATE	DELIVERY MODE
12/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/567,039	PIEK, MATTHIJIS CAROLUS	
	Examiner	Art Unit	
	Yon Couso	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-6 and 10* is/are allowed.

6)☒ Claim(s) *7-9 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11 is directed to a computer program product which is drawn to descriptive material NOT claimed as residing on a computer readable medium. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized.

Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality

to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b). When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a).

In contrast, a claimed computer-readable medium encoded with data structure defines structural interrelationships between the data structure and the computer software and hardware components which permits the data structure 's functionality to be realized, and is thus statutory (MPEP 2106.IV.B.1(a)).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-9 are rejected under 35 U.S.C. 102(e) as being ancipated by Lyons et al (US Patent No. 6,970,591).

As to claim 7, Lyons teaches an image processing apparatus (400) comprising: receiving means (402) for receiving a signal corresponding to a display sequence of video images (S2 in figure 3 and 140 in figure 4); an overlay detection unit (408) for detecting whether a particular pixel of a first image of the display sequence of video images represents a part of a graphics overlay which is merged with an input sequence of video images to create the display sequence of video images (S4 –S10 in figure 3); and an image processing unit (404) for calculating a sequence of output images on basis of the display sequence of video images and on basis of a graphics overlay detection signal being provided by the overlay detection unit (408) (S12-S14 in figure 3).

As to claim 8, Lyons teaches that the image processing unit (404) is a temporal up-conversion unit (S8 in figure 3).

As to claim 9, Lyons teaches a display device (406) for displaying the output images (22 in figure 1).

3. Claims 1-6 and 10 are allowed.

4. The following is an examiner's statement of reasons for allowance: Prior art fails to teach or suggest a method and an apparatus for detecting whether a particular pixel of a first image of a display sequence of video images represents a part of a graphics overlay which is merged with an input sequence of video images to create the display sequence of video images, the method comprising, testing whether a first difference (D11) between a first value of the particular pixel (P(1,n)) and a second value of a

corresponding pixel (P(1,n-1)) of a second image of the display sequence of video images is less than a first predetermined threshold (T1), testing whether a second difference (D22) between a third value of a second pixel (P(2,n)), being located in a spatial neighborhood of the particular pixel (P(1,n)), and a fourth value of a fourth pixel (P(2,n-1)) of the second image of the display sequence of video images, corresponding to the second pixel (P(2,n)), is less than a second predetermined threshold (T2), testing whether a third difference (D12) between the first value of the particular pixel (P(1,n)) and the third value of the second pixel (P(2,n)) is less than a third predetermined threshold (T3), and establishing that the particular pixel represents the part of the graphics overlay if the first difference (D11) is less than the first predetermined threshold (T1), the second difference (D22) is less than the second predetermined threshold (T2) and the third difference (D12) is less than the third predetermined threshold (T3).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilf et al, Osberger, Herman et al, Bender et al, Jojic et al, and Panusopone et al are cited.

6. Please provide a copy of the references (non-patent) cited in the International Search Report, Zhang et al and Tseng et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis, can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

YON J. COUSO
PRIMARY EXAMINER

November 29, 2007